Receipt date: 01/30/2009

10582888 - GAU: 1796

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (12-08)

Approved for use through 01/31/2009, OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		10582888	
	Filing Date		2006-06-14	
	First Named Inventor Petrus		trus et al.	
	Art Unit	<del>-</del>	1796	
	Examiner Name	LIAM	LIAM J. HEINCER	
	Attorney Docket Nur	nber	TS1404 US	

т	T	·	0.8.	PATENTS	
Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
1	4652685		1987-03-24	Cawse et al.	
2	5596113		1997-01-21	Douglas et al.	
3	5892107		1999-04-06	Farone et al.	
4	5883266	000000000000000000000000000000000000000	1999 03 16	Elliatt et al	
5	6894199	B2	2005-05-17	Heikkila et al.	
6	4462865		1984-07-31	Walles, Wihelm E.	
7	6527914		2003-03-04	Shevchenko et al.	
8	4594130		1986-06-10	Chang et al.	
	1 2 3 5 6 7	No Patent Number  1 4652685  2 5596113  3 5892107  4 5883266  5 6894199  6 4462865  7 6527914	No     Patent Number     Code¹       1     4652685       2     5596113       3     5892107       4     5883266       5     6894199       6     4462865       7     6527914	Cite No       Patent Number       Kind Code1       Issue Date         1       4652685       1987-03-24         2       5596113       1997-01-21         3       5892107       1999-04-06         4       5883266       1999-03-16         5       6894199       B2       2005-05-17         6       4462865       1984-07-31         7       6527914       2003-03-04	Cite No         Patent Number         Kind Code1         Issue Date         Name of Patentee or Applicant of cited Document           1         4652685         1987-03-24         Cawse et al.           2         5596113         1997-01-21         Douglas et al.           3         5892107         1999-04-06         Farone et al.           4         5883266         1999-03-16         Eiliett et al.           5         6894199         B2         2005-05-17         Heikkila et al.           6         4462865         1984-07-31         Walles, Wihelm E.           7         6527914         2003-03-04         Shevchenko et al.

-	0582888	~	GAU:	1	796	

<b>INFOR</b>	MATIO	N DIS	CLOSU	RE
STATE	MENT	BY AP	PLICA	NT

Application Number		10582888	
Filing Date		2006-06-14	7.10
First Named Inventor	Petru	us et al.	
Art Unit		1796	
Examiner Name	LIAN	J. HEINCER	
Attorney Docket Numb	er	TS1404 US	

	Ţ			I		Ţ				
	9	5068105		1991-1	1-26	Lewis et al.				
If you wis	h to a	Idd additional U.S. Pate	nt citatio	n inform	nation pl	lease click the	Add button.			
	*					CATION PUB				
Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publica Date	ation	Name of Pat of cited Docu	entee or Applicant ument	Relev	es,Columns,Lines where vant Passages or Relev es Appear	e /ant
	1	20060162239	A1	2006-07	7-27	Van Den Brinl	k et al.			
	2	20020069987	A1	2002-06	6-13	Pye				
	3	20040231810	A1	2004-11	1-25	Rousu et al.				
If you wisl	n to a	dd additional U.S. Publi	shed Ap	plication	citatio	n information	please click the Ad	d butto	on.	
			•	FOREIG	GN PAT	ENT DOCUM	TENTS			
Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup>		Kind Code <sup>4</sup>	Publication Date	Name of Patente Applicant of cited Document		Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T5
•	1	05/059016	wo		A1	2005-06-30	Shell Canada Limit	ed		
	2	03/014231	wo		A1	2003-02-20	Shell Canada Limit	ed		
	3	2040275	GB	,	А	1980-08-28	Southwest Researd Institute	ch		

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number		10582888	
Filing Date		2006-06-14	
First Named Inventor	Petr	us et al.	
Art Unit		1796	
Examiner Name	LIAN	J. HEINCER	
Attorney Docket Number		TS1404 US	

	4	69409	EP	A1	1985-11-21	Stamicarbon B.V.	
	5	98/26869	wo	A1	1998-06-25	Battelle Memorial Institute	
	6	99/65851	wo	A1	1999-12-23	Catalytic Distillation Technologies	
	7	02/074760	wo	A1	2002-09-26	E.I. Dupont De Nemours and Company	
	8	7-18269	JP		1995-01-20		
	9	472474	EP	A1	1996-01-24	Rengo Co. Ltd	
200000000000000000000000000000000000000	-4 <del>Q</del>	4036878	<del></del>	.copApthococco	<del>-<u>2</u>000-00-20</del>	-Kabushiki Kaisha Toshiba	
	11	82/00483	wo	A1	1982-02-18	BAU-UND Forschungsgesell-Schaft Thermoform AG	
	12	01/59202	wo	A2	2001-08-16	Akzo Nobel N.V.	
If you wis	h to ac	dd additional Foreign P	atent Document	citation	information p	lease click the Add button	
			NON-PATE	NT LITE	RATURE DO	CUMENTS	—··· · · · · · · · · · · · · · · · · ·
Examiner Initials*	Cite No	Include name of the a (book, magazine, jour publisher, city and/or o	nal, serial, symp	osium,	catalog, etc), o	the article (when appropriate), title of the item date, pages(s), volume-issue number(s),	<b>Т</b> 5

Receipt date: 01/30/2009 10582888 - GAU: 1796

INFORMATIO	N DISC	LOSURE
STATEMENT	<b>BY AP</b>	PLICANT

Application Number		10582888	
Filing Date		2006-06-14	
First Named Inventor	Petru	us et al.	
Art Unit		1796	
Examiner Name LIAM		I J. HEINCER	
Attorney Docket Number		TS1404 US	

Capenaling United States Petent Application Certal No.: 1/1/814,184 (United States Petent Publication   No.: US2006/0162239 A1).		T		
No.: US2006/0162239 A1).  2	0000000	000000000000000000000000000000000000000	Copending United States Patent Application Script No.: 11/214;494 (United States Patent Publication	
No.: US2007/0034345 A1).			No.: US2006/0162239 A1).	
4 Kirk-Othmer's Encyclopedia of Chemical Technology, 3rd ed., 13:909, dated June 22, 2005.  5 Ullmann's Encyclopedia of Industrial Chemistry, 5th ed., A15:80, 1990.  6 WAN et al., Ruthenium(II)-sulfonated BINAP: A Novel Water-Soluble Asymmetric Hydrogenation Catalyst,"  Tetrahedron: Asymmetry 4(12):2461-2468,1993.  7 BEHR et al., Aqueous Biphasic Catalysis as a Powerful Tool for Catalyst Recycling in Telomerization and Hydrogenation Chemistry, Green Chem., 5(2):198-204, 2003.  8 FABRE et al., "Catalytic Hydrogenation of Arabinonic Acid and Lactones to Arabitol," J. of Catal., 208(1):247-254, 2002.  9 SMOOK, Handbook for Pulp and Paper Technologies, Angus Wilde Publications, 2nd edition, pg. 333. 1990.  10 HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.		2	Copending United States Patent Application Serial No.: 11/420;981 (United States Patent Publication No.: US2007/0034345 A1).	
Ullmann's Encyclopedia of Industrial Chemistry, 5th ed., A15:80, 1990.  WAN et al., Ruthenium(II)-sulfonated BINAP: A Novel Water-Soluble Asymmetric Hydrogenation Catalyst," Tetrahedron: Asymmetry 4(12):2461-2468,1993.  BEHR et al., Aqueous Biphasic Catalysis as a Powerful Tool for Catalyst Recycling in Telomerization and Hydrogenation Chemistry, Green Chem., 5(2):198-204, 2003.  FABRE et al., "Catalytic Hydrogenation of Arabinonic Acid and Lactones to Arabitol," J. of Catal., 208(1):247-254, 2002.  SMOOK, Handbook for Pulp and Paper Technologies, Angus Wilde Publications, 2nd edition, pg. 333. 1990.  HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.		3	European Patent Office Search Report, Application No. 04106969.1, dated June 22, 2005.	
WAN et al., Ruthenium(II)-sulfonated BINAP: A Novel Water-Soluble Asymmetric Hydrogenation Catalyst,"  Tetrahedron: Asymmetry 4(12):2461-2468,1993.  BEHR et al., Aqueous Biphasic Catalysis as a Powerful Tool for Catalyst Recycling in Telomerization and Hydrogenation Chemistry, Green Chem., 5(2):198-204, 2003.  FABRE et al., "Catalytic Hydrogenation of Arabinonic Acid and Lactones to Arabitol," J. of Catal., 208(1):247-254, 2002.  SMOOK, Handbook for Pulp and Paper Technologies, Angus Wilde Publications, 2nd edition, pg. 333. 1990.  HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.		4	Kirk-Othmer's Encyclopedia of Chemical Technology, 3rd ed., 13:909, dated June 22, 2005.	
Tetrahedron: Asymmetry 4(12):2461-2468,1993.    Tetrahedron: Asymmetry 4(12):2461-2468,1993.		5	Ullmann's Encyclopedia of Industrial Chemistry, 5th ed., A15:80, 1990.	
Hydrogenation Chemistry, Green Chem., 5(2):198-204, 2003.  FABRE et al., "Catalytic Hydrogenation of Arabinonic Acid and Lactones to Arabitol," J. of Catal., 208(1):247-254, 2002.  SMOOK, Handbook for Pulp and Paper Technologies, Angus Wilde Publications, 2nd edition, pg. 333. 1990.  HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.  YAMADA et al., "Rapid Liquefaction of Lignocellulosic Waste by Using Ethylene Carbonate" Biores. Tech., 70:61-67,		6	WAN et al., Ruthenium(II)-sulfonated BINAP: A Novel Water-Soluble Asymmetric Hydrogenation Catalyst," Tetrahedron: Asymmetry 4(12):2461-2468,1993.	
SMOOK, Handbook for Pulp and Paper Technologies, Angus Wilde Publications, 2nd edition, pg. 333. 1990.  HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.  YAMADA et al., "Rapid Liquefaction of Lignocellulosic Waste by Using Ethylene Carbonate" Biores. Tech., 70:61-67,		7	BEHR et al., Aqueous Biphasic Catalysis as a Powerful Tool for Catalyst Recycling in Telomerization and Hydrogenation Chemistry, Green Chem., 5(2):198-204, 2003.	
HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.  YAMADA et al., "Rapid Liquefaction of Lignocellulosic Waste by Using Ethylene Carbonate" Biores. Tech., 70:61-67,		8	FABRE et al., "Catalytic Hydrogenation of Arabinonic Acid and Lactones to Arabitol," J. of Catal., 208(1):247-254, 2002.	
deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.  YAMADA et al., "Rapid Liquefaction of Lignocellulosic Waste by Using Ethylene Carbonate" Biores. Tech., 70:61-67.		9	SMOOK, Handbook for Pulp and Paper Technologies, Angus Wilde Publications, 2nd edition, pg. 333. 1990.	
YAMADA et al., "Rapid Liquefaction of Lignocellulosic Waste by Using Ethylene Carbonate" Biores. Tech., 70:61-67, 1999.		10	HEITZ et al., "Solvent Effects on Liquefaction: Solubilization Profiles of a Canadian Prototype Wood, Populus deltoides, in the Presence of Different Solvents," Can. J. Chem. Eng., 72:1021-1027, December 1994.	
		11	YAMADA et al., "Rapid Liquefaction of Lignocellulosic Waste by Using Ethylene Carbonate" Biores. Tech., 70:61-67, 1999.	

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number		10582888	
Filing Date		2006-06-14	
First Named Inventor	Petru	us et al.	
Art Unit	· · · · · · · · · · · · · · · · · · ·	1796	***
Examiner Name LIAM		J. HEINCER	
Attorney Docket Number		TS1404 US	

Examiner Signature /Liam He *EXAMINER: Initial if reference consi citation if not in conformance and not	lered, whether or not citat	Date Considere	d 03/17/2009
*EXAMINER: Initial if reference consi citation if not in conformance and not	lered, whether or not citat	tion is in conformance with MDED	
	considered. Include copy	of this form with next communicat	rion to applicant
		of this form with next communicat	ion to applicant.
1 See Kind Codes of LISPTO Betast Degumen	at warm LISPITO COV or MPET	2004.04. 2 5-4	
See Kind Codes of USPTO Patent Documen Standard ST.3). 3 For Japanese patent documents.	ents, the indication of the year o	f the reign of the Emperor must precede the	ument, by the two-letter code (WIP)